

dated sedimentary materials formed from a wide variety of parent materials.

- (2) The varying chemical composition, degree of weathering, and the relatively acid environment have created soils of varying types, which are peculiarly corrosive in nature.
 - (3) Much of the surface soil in Belmont is highly expansive (i.e., shrink-swell behavior) and low bearing strength. There are two (2) types of expansive soils in the area, the organic silty clays which are the recent bay muds and the plastic silty clays which weather from the shale found in the hills surrounding Belmont.
 - (4) The local climate is characterized by markedly delineated rainy and dry seasons, which tend to maximize the expansive characteristics of soil.
 - (5) Some parts of the Belmont have hard water, which is corrosive to ferrous pipe.
 - (6) The groundwater table is unusually high in many places.
 - (7) Belmont is in a highly active seismic area.
- (b) The use of ABS or PVC piping is reasonably necessary because of topographical conditions existing in the city consisting of steep terrain. Due to the high expansion of plastic piping, the accumulative expansion of piping in excess of two (2) stories may be enough to change the flow direction of horizontal branches installed with minimal slope.
 - (c) Backflow protection is required if drainage piping serving fixtures is less than twelve (12) inches above next upstream manhole because the topography Belmont includes mountainous and foothill areas with intermittent steep slopes. Also, Belmont is located in a seismically active area, which increases the likelihood of breakage of building sewers and laterals,

leading to an above average potential of sewage back-up into buildings without adequate protection.

- (d) Belmont soils are expansive in nature. These expansive soils create unstable conditions which increase the potential of breaks in sewer laterals. To maintain health and sanitary services, it is necessary to gain access to periodically maintain public sanitary laterals. This is accomplished by the additional cleanout as required above.
- (e) Where water heaters are located in living areas or when leakage would damage a building or its contents, a requirement that water heaters shall have safety pans with drains is necessary. This is required because in the event of a leak the dwelling unit would flood without the requirement of a pan. Belmont is in seismic zone 4, the most intense seismic zone, and its proximity to active seismic faults increases the chances of possible water heater failure, particularly those that are nearing the end of their service life spans.
- (f) Condensate disposal and drain sizing is necessary because the waste water treatment facilities serving Bay Area cities are operating at or near maximum capacity and the discharge of treated waste water into San Francisco Bay is detrimental to its sensitive ecosystem. Cooling coil and comfort cooling equipment condensate waste discharge does not contain pollutants which require treatment before being discharged into storm sewers or the ground.

(Ord. No. 754, § 4, 11-12-86; Ord. No. 838 § 4, 1-8-91; Ord. No. 899, § 1, 12-18-95)

Secs. 7-42—7-50. Reserved.

DIVISION 4. ELECTRICAL CODE

Sec. 7-51. Adopted; exceptions; purposes for exceptions.

7-51-01. Adopted

The code published by the National Fire Protection Association entitled National Electrical Code, 1993 edition, hereinafter the "electrical code," by this reference is incorporated herein as the rules, regulations and standards within the city as to all matters contained therein, except as otherwise provided in this division.

(Ord. No. 754, § 4, 11-12-86; Ord. No. 838, § 4, 1-8-91; Ord. No. 899, § 1, 12-18-95)

7-51-02. Exceptions. Article II (Administrative Code) of chapter 7 of the Code of the City of Belmont shall apply to the administration of this code.

- (a) Article 336-4 of the National Electric Code is amended to read:

Type NM or NMC. Types NM and NMC cables shall not be used:

- (1) In any dwelling or structure exceeding three (3) floors above grade;
- (2) As service-entrance cable;
- (3) Embedded in poured cement; or
- (4) In any nonresidential occupancy. For the purposes of this article, the first floor of a building shall be that floor that has fifty (50) percent or more of the exterior wall surface area level with or above finished grade. One (1) additional level that is the first level and not designed for human habitation and used only for vehicle parking, storage or similar use shall be permitted.

- (b) Chapter 2, Article 230 is amended by repealing the exemptions to Section 230-41.

- (c) Chapter 2, Article 230, Section 230-70 (a) is amended to read:

The service equipment and disconnecting means shall be located and installed so as to be readily accessible from the exterior of the building at a point nearest to the entrance of the service conductors. Sufficient access and work space shall be provided for the service equipment. Exception: Due to special circumstances, substantiated by written evidence, the

administrative authority may approve other accessible service equipment locations.

- (d) Chapter 2, Article 250, Sections 250-81 (c) is amended to read:

A grounding electrode shall be installed as follows: Not less than thirty (30) feet of continuous one-half (½) inch diameter reinforcing rod shall be placed within three (3) inches of the bottom of the concrete footing. Two (2) reinforcing rods must be used, but they must extend in separate directions and be bonded together above the foundation and be determined by Table 250-94. Other means may be used when approved by the administrative authority.

7-51-03. Purposes for exceptions:

- (a) It is necessary to limit use of NM and NMC cables. Belmont is located in the highly active seismic zone 4. Nonmetallic-sheathed cable is not afforded the same protection from damage as wiring in raceways. Damage to nonmetallic-sheathed cable could occur in a seismic event which increases the potential for a fire.
(Ord. No. 754, § 4, 11-12-86; Ord. No. 838, § 4, 1-8-91; Ord. No. 899, § 1, 12-18-95)

Secs. 7-52—7-60. Reserved.

DIVISION 5. HOUSING CODE

Sec. 7-61. Adopted.

The code published by the International Conference of Building Officials, entitled, Uniform Housing Code, 1994 edition, hereinafter called "housing code," by this reference is incorporated herein as and for the rules, regulations and standards within the city as to all matters therein contained.

(Ord. No. 754, § 4, 11-12-86; Ord. No. 838, § 4, 1-8-91; Ord. No. 899, § 1, 12-18-96)

Secs. 7-62—7-135. Reserved.